

APPENDIX A
LITHOLOGIC LOGS

Boring Log SheetBoring ID PDD-SB01Date 4/4/05Location Ballfields

Boring Diameter	<u>2</u> in	Total Depth	<u>0.5</u> ft
Casing Outer Diameter	<u>--</u> in	Sand Pack	<u>--</u>
Casing Inner Diameter	<u>--</u> in	Sand Pack Depth	from <u>--</u> to <u>--</u> ft
Casing Material	<u>--</u>	Grout Material	<u>--</u>
Screen Type	<u>--</u>	Grout Depth	from <u>--</u> to <u>--</u> ft
Screen Slot	<u>--</u>	Surface Completion	<u>--</u>
Screen Length	<u>--</u> ft	Drilling Method	<u>HAND AUGER</u>
Screen Depth	from <u>--</u> to <u>--</u> ft	Driller	<u>--</u>

Lithologic Description	Depth	Sample	USCS	Rec.	PID
Brown clayey silt, highly plastic, roots, pieces of gravel, very moist	0-0.5	Yes	OH	100	--

Logged by: Lydia CummingCompletion Date: 4/4/05Notes: 13:30 TO-63-PDD-SB01-0-0.5 [Metals, DDTs, PCBs (hold for analysis)]

Boring Log SheetBoring ID PDD-SB02Date 4/4/05Location Ballfields

Boring Diameter	<u>2</u> in	Total Depth	<u>0.5</u> ft
Casing Outer Diameter	<u>--</u> in	Sand Pack	<u>--</u>
Casing Inner Diameter	<u>--</u> in	Sand Pack Depth	from <u>--</u> to <u>--</u> ft
Casing Material	<u>--</u>	Grout Material	<u>--</u>
Screen Type	<u>--</u>	Grout Depth	from <u>--</u> to <u>--</u> ft
Screen Slot	<u>--</u>	Surface Completion	<u>--</u>
Screen Length	<u>--</u> ft	Drilling Method	<u>HAND AUGER</u>
Screen Depth	from <u>--</u> to <u>--</u> ft	Driller	<u>--</u>

Lithologic Description	Depth	Sample	USCS	Rec.	PID
Brown clayey silt, some mottling (orange and gray), plastic, roots, moist	0-0.5	Yes	CH	100	--

Logged by: Lydia CummingCompletion Date: 4/4/05Notes: 14:30 TO-63-PDD-SB02-0-0.5 [Metals, DDTs, PCBs (hold for analysis)]

Boring Log SheetBoring ID PDD-SB03Date 4/4/05Location Ballfields

Boring Diameter	<u>2</u> in	Total Depth	<u>0.5</u> ft
Casing Outer Diameter	<u>--</u> in	Sand Pack	<u>--</u>
Casing Inner Diameter	<u>--</u> in	Sand Pack Depth	from <u>--</u> to <u>--</u> ft
Casing Material	<u>--</u>	Grout Material	<u>--</u>
Screen Type	<u>--</u>	Grout Depth	from <u>--</u> to <u>--</u> ft
Screen Slot	<u>--</u>	Surface Completion	<u>--</u>
Screen Length	<u>--</u> ft	Drilling Method	<u>HAND AUGER</u>
Screen Depth	from <u>--</u> to <u>--</u> ft	Driller	<u>--</u>

Lithologic Description	Depth	Sample	USCS	Rec.	PID
Brown clayey silt, highly plastic, roots, pieces of gravel, moist	0-0.5	Yes	OH	100	--

Logged by: Lydia CummingCompletion Date: 4/4/05Notes: 15:00 TO-63-PDD-SB03-0-0.5 [Metals, DDTs, PCBs (hold for analysis)]

Boring Log SheetBoring ID PDD-SB04Date 4/4/05Location Ballfields

Boring Diameter	<u>2</u> in	Total Depth	<u>0.5</u> ft
Casing Outer Diameter	<u>--</u> in	Sand Pack	<u>--</u>
Casing Inner Diameter	<u>--</u> in	Sand Pack Depth	from <u>--</u> to <u>--</u> ft
Casing Material	<u>--</u>	Grout Material	<u>--</u>
Screen Type	<u>--</u>	Grout Depth	from <u>--</u> to <u>--</u> ft
Screen Slot	<u>--</u>	Surface Completion	<u>--</u>
Screen Length	<u>--</u> ft	Drilling Method	<u>HAND AUGER</u>
Screen Depth	from <u>--</u> to <u>--</u> ft	Driller	<u>--</u>

Lithologic Description

Brown clayey silt, little sand, plastic, roots, trace gravel, slightly moist

Depth

0-0.5

Sample

Yes

USCS

OH

Rec.

100

PID

--

Logged by: Lydia CummingCompletion Date: 4/4/05Notes: 15:15 TO-63-PDD-SB04-0-0.5 [Metals, DDTs, PCBs (hold for analysis)]

Boring Log SheetBoring ID PDD-SB05Date 4/4/05Location BallfieldsBoring Diameter 2 inTotal Depth -- ftCasing Outer Diameter -- inSand Pack --Casing Inner Diameter -- inSand Pack Depth from -- to -- ftCasing Material --Grout Material --Screen Type --Grout Depth from -- to -- ftScreen Slot --Surface Completion --Screen Length -- ftDrilling Method HAND AUGERScreen Depth from -- to -- ftDriller --**Lithologic Description**

Depth

Sample

USCS

Rec.

PID

Brown clayey silt/silty clay, highly plastic, roots, moist

0-0.5

Yes

OH

100

--

Logged by: Lydia CummingCompletion Date: 4/4/05Notes: 15:30 TO-63-PDD-SB05-0-0.5. Collect rinsate from SS mixing bowl. TO-63-RINSATE-01 at 1640

Boring Log SheetBoring ID 191-SB03Date 4/5/05Location BallfieldsBoring Diameter 2.5 inTotal Depth 12 ftCasing Outer Diameter -- inSand Pack --Casing Inner Diameter -- inSand Pack Depth from -- to -- ftCasing Material --Grout Material Type I-II CementScreen Type --Grout Depth from 0 to 8 ftScreen Slot --Surface Completion --Screen Length -- ftDrilling Method DIRECT PUSHScreen Depth from -- to -- ftDriller PRECISION**Lithologic Description**

	Depth	Sample	USCS	Rec.	PID
Asphalt rubble	0-0.75	No	--	100	0
Brown clayey sand to clayey silt, dry	0.75-1.5	Yes	SC	100	0
Gray clayey silt, moist, med plastic	1.5-4	No	ML	100	0
As above, more clay	4-7	No	ML	100	0
Gray silty clay, very moist to wet, soft (Bay mud)	7-8	No	CL	100	0
Gray silty clay, highly plastic, wet (Bay mud)	8-12	No	CH	100	0
Water table at 7.5 ft bgs (hole collapsed at ~8 ft)					
Placed PVC pipe in borehole (set screen 3-8 ft bgs) to collect water sample. Water level in pip = 5.2 ft bgs					

Logged by: Lydia CummingCompletion Date: 4/5/05Notes: Geoprobe 6610 DT, track mounted system with 4ft-samplerTime: 8:40 TO63-191-SB03-0-0.5 (soil) TO63-191-GW01 (water)

Boring Log Sheet

Boring ID 191-SB01



Date 4/5/05

Location Ballfields

Boring Diameter 2.5 in

Total Depth 4 ft

Casing Outer Diameter -- in

Sand Pack --

Casing Inner Diameter -- in

Sand Pack Depth from -- to ft

Casing Material --

Grout Material Type I-II Cement

Screen Type --

Grout Depth from 0 to 4 ft

Screen Slot --

Surface Completion --

Screen Length _____ -- ft

Drilling Method DIRECT PUSH

Screen Depth from -- to -- ft

Driller PRECISION

[illegible]

Logged by: Lydia Cumming

Completion Date: 4/5/05

Notes: _ Geoprobe 6610 DT, track mounted system with 4ft-sampler

Time: 9:15 TO63-191-SB01-0-0.5 (soil)

Boring Log SheetBoring ID 191-SB02Date 4/5/05Location Ballfields

Boring Diameter	<u>2.5</u> in	Total Depth	<u>4</u> ft
Casing Outer Diameter	<u>--</u> in	Sand Pack	<u>--</u>
Casing Inner Diameter	<u>--</u> in	Sand Pack Depth	from <u>--</u> to <u>--</u> ft
Casing Material	<u>--</u>	Grout Material	<u>Type I-II Cement</u>
Screen Type	<u>--</u>	Grout Depth	from <u>0</u> to <u>4</u> ft
Screen Slot	<u>--</u>	Surface Completion	<u>--</u>
Screen Length	<u>--</u> ft	Drilling Method	<u>DIRECT PUSH</u>
Screen Depth	from <u>--</u> to <u>--</u> ft	Driller	<u>PRECISION</u>

Lithologic Description

Gray silty clay, slight mottling, medium soft, highly plastic, some rope debris (debris omitted from sample)

Depth

0-0.5

Sample

Yes

USCS

CH

Rec.

100

PID

0

Gray silty clay, slight mottling, med plastic, medium soft, moist

0.5-4

No

CL

100

0

Logged by: Lydia CummingCompletion Date: 4/5/05Notes: Geoprobe 6610 DT, track mounted system with 4ft-samplerTime: 9:35 TO63-191-SB02-0-0.5

Boring Log SheetBoring ID 193-SB01Date 4/5/05Location Ballfields

Boring Diameter	<u>2.5</u> in	Total Depth	<u>4</u> ft
Casing Outer Diameter	<u>--</u> in	Sand Pack	<u>--</u>
Casing Inner Diameter	<u>--</u> in	Sand Pack Depth	from <u>--</u> to <u>--</u> ft
Casing Material	<u>--</u>	Grout Material	<u>Type I-II Cement</u>
Screen Type	<u>--</u>	Grout Depth	from <u>0</u> to <u>4</u> ft
Screen Slot	<u>--</u>	Surface Completion	<u>--</u>
Screen Length	<u>--</u> ft	Drilling Method	<u>DIRECT PUSH</u>
Screen Depth	from <u>--</u> to <u>--</u> ft	Driller	<u>PRECISION</u>

Lithologic Description

Gray clayey silt, slight mottling (brown), medium soft, medium plastic, roots/organic matter

Depth

0-0.5

Sample

Yes

USCS

CL

Rec.

100

PID

0

As above

0.5-4

No

CL

100

0

Logged by: Lydia CummingCompletion Date: 4/5/05Notes: Geoprobe 6610 DT, track mounted system with 4ft-samplerTime: 9:50 TO63-193-SB01-0-0.5. Collected two surface samples side-by-side to fill jar

Boring Log SheetBoring ID 193-SB03Date 4/5/05Location Ballfields

Boring Diameter	<u>2.5</u> in	Total Depth	<u>12</u> ft
Casing Outer Diameter	<u>--</u> in	Sand Pack	<u>--</u>
Casing Inner Diameter	<u>--</u> in	Sand Pack Depth	from <u>--</u> to <u>--</u> ft
Casing Material	<u>--</u>	Grout Material	<u>Type I-II Cement</u>
Screen Type	<u>--</u>	Grout Depth	from <u>0</u> to <u>8</u> ft
Screen Slot	<u>--</u>	Surface Completion	<u>--</u>
Screen Length	<u>--</u> ft	Drilling Method	<u>DIRECT PUSH</u>
Screen Depth	from <u>--</u> to <u>--</u> ft	Driller	<u>PRECISION</u>

Lithologic Description	Depth	Sample	USCS	Rec.	PID
Gray clayey silt, trace gravel, roots, moist	0-0.8	Yes	ML	85	0
Gray clayey silt, slightly mottled, roots, medium plastic, roots, moist	0.8-4	No	ML	85	0
As above, increase clay content, soft. At 6 ft change to gray clay, soft (Bay mud), moist	4-8	No	CL	100	0
Bay mud (wet) (minimal recovery)	8-12	No	CL	<5	0
Water table at 8 ft bgs (hole collapsed at ~8 ft)					
Placed PVC pipe in borehole (set screen 3-8 ft bgs) to collect water sample. Measured depth to water is 4.6 ft bgs.					

Logged by: Lydia CummingCompletion Date: 4/5/05Notes: Geoprobe 6610 DT, track mounted system with 4ft-sampler
Collect MS/MSD and duplicate here (four surface samples side by side to fill jars).

Boring Log SheetBoring ID 193-SB02Date 4/5/05Location Ballfields

Boring Diameter	<u>2.5</u> in	Total Depth	<u>4</u> ft
Casing Outer Diameter	<u>--</u> in	Sand Pack	<u>--</u>
Casing Inner Diameter	<u>--</u> in	Sand Pack Depth	from <u>--</u> to <u>--</u> ft
Casing Material	<u>--</u>	Grout Material	<u>Type I-II Cement</u>
Screen Type	<u>--</u>	Grout Depth	from <u>0</u> to <u>4</u> ft
Screen Slot	<u>--</u>	Surface Completion	<u>--</u>
Screen Length	<u>--</u> ft	Drilling Method	<u>DIRECT PUSH</u>
Screen Depth	from <u>--</u> to <u>--</u> ft	Driller	<u>PRECISION</u>

Lithologic Description	Depth	Sample	USCS	Rec.	PID
Reddish brown sandy silt (brick dust?), little orange-brown clayey sand	0-0.75	Yes	ML	80	0
Gray clayey silt, slight mottling, stiff to medium soft, moist	0.75-4	No	ML/ CL	80	0

Logged by: Lydia CummingCompletion Date: 4/5/05Notes: Geoprobe 6610 DT, track mounted system with 4ft-sampler
TO63-193-SB02-0-0.5

Boring Log SheetBoring ID SPN-SB03Date 4/5/05Location Ballfields

Boring Diameter	<u>2.5</u> in	Total Depth	<u>12</u> ft
Casing Outer Diameter	<u>--</u> in	Sand Pack	<u>--</u>
Casing Inner Diameter	<u>--</u> in	Sand Pack Depth	from <u>--</u> to <u>--</u> ft
Casing Material	<u>--</u>	Grout Material	<u>Type I-II Cement</u>
Screen Type	<u>--</u>	Grout Depth	from <u>0</u> to <u>8</u> ft
Screen Slot	<u>--</u>	Surface Completion	<u>--</u>
Screen Length	<u>--</u> ft	Drilling Method	<u>DIRECT PUSH</u>
Screen Depth	from <u>--</u> to <u>--</u> ft	Driller	<u>PRECISION</u>

Lithologic Description

Depth	Sample	USCS	Rec.	PID
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Gray-brown clayey silt with organic matter, roots, moist	0-0.5	Yes	ML/ OL	75	0
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Gray clayey silt, slightly mottled, stiff, med plastic, moist	0.5-4	No	ML	75	0
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As above	4-5	Yes	ML	85	0
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Brown-gray clayey sand, wet, to brown-gray silty clay, soft, highly plastic, bottom 2 inches soft gray clay (Bay mud)	5-8	No	SC/ CH	85	0
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Gray clayey silt to silty clay, soft, highly plastic (Bay mud)	8-12	No	CH	100	0
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Water table at ~5'2" bgs					
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Placed PVC pipe in borehole (set screen 3-8 ft bgs) to collect water sample					
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Logged by: Lydia CummingCompletion Date: 4/5/05Notes: Geoprobe 6610 DT, track mounted system with 4ft-samplerTime: 14:00 TO63-SPN-SB03-0-0.5/TO63-SPN-SB03-4-5.0 (soil) TO63-SPN-GW01 (water)

Boring Log SheetBoring ID SPN-SB02Date 4/5/05Location BallfieldsBoring Diameter 2.5 inTotal Depth 12 ftCasing Outer Diameter -- inSand Pack --Casing Inner Diameter -- inSand Pack Depth from -- to -- ftCasing Material --Grout Material Type I-II CementScreen Type --Grout Depth from 0 to 8 ftScreen Slot --Surface Completion --Screen Length -- ftDrilling Method DIRECT PUSHScreen Depth from -- to -- ftDriller PRECISION**Lithologic Description**

Depth

Sample

USCS

Rec.

PID

Gray-brown clayey silt with organic matter, roots, moist

0-0.5

Yes

ML/
OL

80

0

Gray clayey silt, slightly mottled, stiff, med plastic, moist

0.5-4

No

ML

80

0

As above to silty sand, gray and brown, wet

4-5

Yes

ML/
SM

85

0

Gray clayey silt, slight mottle, wet, to soft gray clay (Bay mud) at 7.5-8.0 ft, wet

5-8

No

ML/
CH

85

0

Gray silty clay, soft, highly plastic, wet (Bay mud)

8-12

No

CH

100

0

Measure water at 4.6 ft bgs in open borehole

Logged by: Lydia CummingCompletion Date: 4/5/05Notes: Geoprobe 6610 DT, track mounted system with 4ft-sampler
TO63-SPN-SB02-0-0.5 and TO63-SPN-SB02-4-5

Boring Log SheetBoring ID SPN-SB01Date 4/5/05Location BallfieldsBoring Diameter 2.5 inTotal Depth 12 ftCasing Outer Diameter -- inSand Pack --Casing Inner Diameter -- inSand Pack Depth from -- to -- ftCasing Material --Grout Material Type I-II CementScreen Type --Grout Depth from 0 to 8 ftScreen Slot --Surface Completion --Screen Length -- ftDrilling Method DIRECT PUSHScreen Depth from -- to -- ftDriller PRECISION**Lithologic Description**

Depth

Sample

USCS

Rec.

PID

Brown clayey silt, roots, grass

0-0.75

Yes

ML/
OL

85

0

Brown-gray clayey silt, med plastic, medium stiff, moist

0.75-
3.5No/
Yes

ML

85

0

Brown-gray sandy silt, loose (thin layer) to br-gray clayey silt, medium stiff, med plastic (sampled 3 - 4 ft)

3.5-4

Yes

ML

85

0

Brown-gray clayey silty, medium stiff to soft, moist to wet

4-7.5

No

ML

85

0

Gray silty clay, highly plastic, soft (Bay mud), wet

7.5-8

No

CH

85

0

As above

8-12

No

CH

100

0

Logged by: Lydia CummingCompletion Date: 4/5/05Notes: Geoprobe 6610 DT, track mounted system with 4ft-sampler
TO63-SPN-SB01-0-0.5 and TO63-SPN-SB01-3-4

Boring Log SheetBoring ID RSP-SB02Date 4/5/05Location BallfieldsBoring Diameter 2.5 inTotal Depth 12 ftCasing Outer Diameter -- inSand Pack --Casing Inner Diameter -- inSand Pack Depth from -- to -- ftCasing Material --Grout Material Type I-II CementScreen Type --Grout Depth from 0 to 11 ftScreen Slot --Surface Completion --Screen Length -- ftDrilling Method DIRECT PUSHScreen Depth from -- to -- ftDriller PRECISION**Lithologic Description**

Depth

Sample

USCS

Rec.

PID

2.5ft thick layer of dirt leftover from City on site.

0-2.5

No

--

--

0

Brown-gray clayey silt (native surface) (0-0.5)

0-0.5

Yes

ML

85

0

Brown-gray silty clay, stiff, moist

0.5-4

No

CL

85

0

Br-clayey sand, wet

4-5

No

SC

85

0

Brown-gray mottled clayey silt, hard, dry

5-6

Yes

ML

85

0

Brown-gray clayey silt, soupy, wet

6-7

No

ML

100

0

Light gray clayey silt, moist

7-8

No

ML

100

0

Org-brown sandy clay, little fine gravel, dry, hard

8-10

No

SC

100

0

By end of boring, water level in open hole is 0.5 ft – result of ponding from water trapped in overlying sediment?

Logged by: Lydia CummingCompletion Date: 4/5/05Notes: Geoprobe 6610 DT, track mounted system with 4ft-sampler
TO63-RSP-SB02-0-0.5 and TO63-RSP-SB02-5-6

Boring Log SheetBoring ID RSP-SB03Date 4/5/05Location BallfieldsBoring Diameter 2.5 inTotal Depth 12 ftCasing Outer Diameter -- inSand Pack --Casing Inner Diameter -- inSand Pack Depth from -- to -- ftCasing Material --Grout Material Type I-II CementScreen Type --Grout Depth from 0 to 11 ftScreen Slot --Surface Completion --Screen Length -- ftDrilling Method DIRECT PUSHScreen Depth from -- to -- ftDriller PRECISION**Lithologic Description**

Depth

Sample

USCS

Rec.

PID

1.8 ft thick layer of dirt leftover from City on site.

0-1.8

No

--

75

0

Greenish clayey/silty sand, dry (original surface)

0-2

Yes
(0-.5)

SC

75

0

As above to orange-brown silty sand, little gravel, hard, dry

2-6

Yes
(3-4)

SM

50

0

Gray clayey sand, wet

6-7.5

No

SC

100

0

Orange-brown clayey silt, little sand and gravel, semiconsolidated, hard

7.5-10

No

SM

100

0

Initial water level measurement at 5.12 ft bgs. Set PVC screen 6-11 ft below current grade

Logged by: Lydia CummingCompletion Date: 4/5/05Notes: Geoprobe 6610 DT, track mounted system with 4ft-sampler. Collect RINSATE-02 from mixing bowl and spoons. TO63-RSP-SB03-0-0.5/TO63-RSP-SB03-3-4 (soil); TO63-RSP-GW01 (water)

Boring Log SheetBoring ID R3-SB04Date 4/6/05Location Ballfields

Boring Diameter	<u>2.5</u> in	Total Depth	<u>12</u> ft
Casing Outer Diameter	<u>--</u> in	Sand Pack	<u>--</u>
Casing Inner Diameter	<u>--</u> in	Sand Pack Depth	from <u>--</u> to <u>--</u> ft
Casing Material	<u>--</u>	Grout Material	<u>Type I-II Cement</u>
Screen Type	<u>--</u>	Grout Depth	from <u>0</u> to <u>12</u> ft
Screen Slot	<u>--</u>	Surface Completion	<u>--</u>
Screen Length	<u>--</u> ft	Drilling Method	<u>DIRECT PUSH</u>
Screen Depth	from <u>--</u> to <u>--</u> ft	Driller	<u>PRECISION</u>

Lithologic Description	Depth	Sample	USCS	Rec.	PID
Brown-gray mottled clayey silt and sand	0-0.5	Yes	SC	75	0
Gray clayey silt/silty clay, highly plastic, medium soft to stiff, very moist (Bay mud)	0.5-4	Yes (2-3)	CH	75	0
Gray silty clay, wet (Bay mud)	4-8	No	CH	70	0
As above	8-9	No	CH	100	0
Brown-gray mottled clayey silt, hard, low plasticity, hard	9-12	No	ML	100	0
Water is at surface. Placed PVC screen 6-11 ft bgs to collect water sample. Water is ponding from overlying sediment.					

Logged by: Lydia CummingCompletion Date: 4/6/05Notes: Geoprobe 6610 DT, track mounted system with 4ft-samplerTime: 8:15 TO63-R3-SB04-0-0.5/TO63-R3-SB04-2-3

Boring Log SheetBoring ID R3-SB01Date 4/6/05Location Ballfields

Boring Diameter	<u>2.5</u> in	Total Depth	<u>8</u> ft
Casing Outer Diameter	<u>--</u> in	Sand Pack	<u>--</u>
Casing Inner Diameter	<u>--</u> in	Sand Pack Depth	from <u>--</u> to <u>--</u> ft
Casing Material	<u>--</u>	Grout Material	<u>Type I-II Cement</u>
Screen Type	<u>--</u>	Grout Depth	from <u>0</u> to <u>8</u> ft
Screen Slot	<u>--</u>	Surface Completion	<u>--</u>
Screen Length	<u>--</u> ft	Drilling Method	<u>DIRECT PUSH</u>
Screen Depth	from <u>--</u> to <u>--</u> ft	Driller	<u>PRECISION</u>

Lithologic Description

Gray brown silty clay, soft, highly plastic, wet

Depth

0-0.5

Sample

Yes

USCS

CH

Rec.

25

PID

0

As above, more gray

0.5-4

No

CH

25

0

Br-gray mottled clayey silt, moist

4-5

Yes

ML

90

0

Gray clayey silt/silty clay, med plastic, stiff, moist

5-6

No

CL

90

0

Gray silty clay, medium soft, highly plastic, very moist

6-8

No

CH

90

0

Logged by: Lydia CummingCompletion Date: 4/6/05Notes: Geoprobe 6610 DT, track mounted system with 4ft-samplerTime: 9:10 TO63-R3-SB01-0-0.5/TO63-R3-SB01-4-5

Boring Log SheetBoring ID R3-SB03Date 4/6/05Location BallfieldsBoring Diameter 2.5 inTotal Depth 4 ftCasing Outer Diameter -- inSand Pack --Casing Inner Diameter -- inSand Pack Depth from -- to -- ftCasing Material --Grout Material Type I-II CementScreen Type --Grout Depth from 0 to 4 ftScreen Slot --Surface Completion --Screen Length -- ftDrilling Method DIRECT PUSHScreen Depth from -- to -- ftDriller PRECISION**Lithologic Description**

Brown clayey sand, wet

Depth

0-0.5

Sample

Yes

USCS

SC

Rec.

85

PID

0

As above, pieces of concrete (?)

0.5-3

No

SC

85

0

Brown-gray silty clay, med plastic, moist, medium soft

3-4

No

CL

85

0

Logged by: Lydia CummingCompletion Date: 4/6/05Notes: Geoprobe 6610 DT, track mounted system with 4ft-samplerTime: 9:10 TO63-R3-SB03-0-0.5

Boring Log SheetBoring ID R3-SB02Date 4/6/05Location Ballfields

Boring Diameter	<u>2.5</u> in	Total Depth	<u>4</u> ft
Casing Outer Diameter	<u>--</u> in	Sand Pack	<u>--</u>
Casing Inner Diameter	<u>--</u> in	Sand Pack Depth	from <u>--</u> to <u>--</u> ft
Casing Material	<u>--</u>	Grout Material	<u>Type I-II Cement</u>
Screen Type	<u>--</u>	Grout Depth	from <u>0</u> to <u>4</u> ft
Screen Slot	<u>--</u>	Surface Completion	<u>--</u>
Screen Length	<u>--</u> ft	Drilling Method	<u>DIRECT PUSH</u>
Screen Depth	from <u>--</u> to <u>--</u> ft	Driller	<u>PRECISION</u>

Lithologic Description

Brown-gray clayey sand with little fine gravel, sub angular

Depth

0-0.5

Sample

Yes

USCS

SC

Rec.

85

PID

0

Brown-gray mottled silty clay with roots, highly plastic, soft, moist

0.5-4

No

CH

85

0

Logged by: Lydia CummingCompletion Date: 4/6/05Notes: Geoprobe 6610 DT, track mounted system with 4ft-sampler
TO63-R3-SB02-0-0.5

Boring Log SheetBoring ID R4-SB03Date 4/6/05Location BallfieldsBoring Diameter 2.5 inTotal Depth 8 ftCasing Outer Diameter -- inSand Pack --Casing Inner Diameter -- inSand Pack Depth from -- to -- ftCasing Material --Grout Material Type I-II CementScreen Type --Grout Depth from 0 to 8 ftScreen Slot --Surface Completion --Screen Length -- ftDrilling Method DIRECT PUSHScreen Depth from -- to -- ftDriller PRECISION**Lithologic Description**

Depth

Sample

USCS

Rec.

PID

Brown clayey sand, trace pieces gravel, sub angular

0-0.5

Yes

SC

90

0

As Above

0.5-2

No

SC

90

0

Gray silty clay, stiff, highly plastic, moist

2-3

No

CH

90

0

Gray silty clay, soft, highly plastic, very moist

3-4

Yes

CH

90

0

Gray-brown clayey silt/sand, wet. At very bottom of core gray silty clay (Bay mud)

4-8

No

SC

75

0

Logged by: Lydia CummingCompletion Date: 4/6/05Notes: Geoprobe 6610 DT, track mounted system with 4ft-samplerTime: 10:00 TO63-R4-SB03-0-0.5/ TO63-R4-SB03-3-4

Boring Log SheetBoring ID R4-SB02Date 4/6/05Location Ballfields

Boring Diameter	<u>2.5</u> in	Total Depth	<u>4</u> ft
Casing Outer Diameter	<u>--</u> in	Sand Pack	<u>--</u>
Casing Inner Diameter	<u>--</u> in	Sand Pack Depth	from <u>--</u> to <u>--</u> ft
Casing Material	<u>--</u>	Grout Material	<u>Type I-II Cement</u>
Screen Type	<u>--</u>	Grout Depth	from <u>0</u> to <u>4</u> ft
Screen Slot	<u>--</u>	Surface Completion	<u>--</u>
Screen Length	<u>--</u> ft	Drilling Method	<u>DIRECT PUSH</u>
Screen Depth	from <u>--</u> to <u>--</u> ft	Driller	<u>PRECISION</u>

Lithologic Description

Brown clayey sand, little sub angular gravel, moist

Depth

0-0.5

Sample

Yes

USCS

SC

Rec.

85

PID

0

Thin layer of broken concrete or gravel (0.5-0.75) to gray silty clay, stiff, med plastic (Bay Mud)

0.5-4

No

CL

85

0

Logged by: Lydia CummingCompletion Date: 4/5/05Notes: Geoprobe 6610 DT, track mounted system with 4ft-samplerTime: 10:10 TO63-R4-SB02-0-0.5

Boring Log SheetBoring ID R4-SB01Date 4/6/05Location BallfieldsBoring Diameter 2.5 inTotal Depth 4 ftCasing Outer Diameter -- inSand Pack --Casing Inner Diameter -- inSand Pack Depth from -- to -- ftCasing Material --Grout Material Type I-II CementScreen Type --Grout Depth from 0 to 8 ftScreen Slot --Surface Completion --Screen Length -- ftDrilling Method DIRECT PUSHScreen Depth from -- to -- ftDriller PRECISION**Lithologic Description**

Depth

Sample

USCS

Rec.

PID

Brown clayey sand with gravel

0-0.5

Yes

SC

50

0

As above, semi-consolidated sand at bottom

0.5-2

NO

SC

50

0

Logged by: Lydia CummingCompletion Date: 4/6/05Notes: Geoprobe 6610 DT, track mounted system with 4ft-samplerTime: 10:15 TO63-R4-SB01-0-0.5 (soil)

Boring Log SheetBoring ID R4-SB04Date 4/6/05Location Ballfields

Boring Diameter	<u>2.5</u> in	Total Depth	<u>12</u> ft
Casing Outer Diameter	<u>--</u> in	Sand Pack	<u>--</u>
Casing Inner Diameter	<u>--</u> in	Sand Pack Depth	from <u>--</u> to <u>--</u> ft
Casing Material	<u>--</u>	Grout Material	<u>Type I-II Cement</u>
Screen Type	<u>--</u>	Grout Depth	from <u>0</u> to <u>10</u> ft
Screen Slot	<u>--</u>	Surface Completion	<u>--</u>
Screen Length	<u>--</u> ft	Drilling Method	<u>DIRECT PUSH</u>
Screen Depth	from <u>--</u> to <u>--</u> ft	Driller	<u>PRECISION</u>

Lithologic Description	Depth	Sample	USCS	Rec.	PID
Brown-gray clayey sand/silt, little gravel, wet	0-0.5	Yes	SC	75	0
As above to gray silty clay, mottled, with organic matter, roots, stiff, med plastic	0.5-3	No	CL	75	0
As above, highly plastic, moist	4-5	Yes	CH	100	0
Alternating layers of br-gray clayey sand and gray silty clay, wet	5-8	No	SC/ CL	100	0
As above, trace shells	8-12	No	SC/ CL	100	0
Set PVC screen 5-10 ft bgs (hole collapsed at 10 ft)					

Logged by: Lydia CummingCompletion Date: 4/6/05Notes: Geoprobe 6610 DT, track mounted system with 4ft-sampler
TO63-R4-SB04-0-0.5/ TO63-R4-SB04-4-5

Boring Log SheetBoring ID R5-SB04Date 4/6/05Location Ballfields

Boring Diameter	<u>2.5</u> in	Total Depth	<u>12</u> ft
Casing Outer Diameter	<u>--</u> in	Sand Pack	<u>--</u>
Casing Inner Diameter	<u>--</u> in	Sand Pack Depth	from <u>--</u> to <u>--</u> ft
Casing Material	<u>--</u>	Grout Material	<u>Type I-II Cement</u>
Screen Type	<u>--</u>	Grout Depth	from <u>0</u> to <u>9</u> ft
Screen Slot	<u>--</u>	Surface Completion	<u>--</u>
Screen Length	<u>--</u> ft	Drilling Method	<u>DIRECT PUSH</u>
Screen Depth	from <u>--</u> to <u>--</u> ft	Driller	<u>PRECISION</u>

Lithologic Description

	Depth	Sample	USCS	Rec.	PID
Brown clayey sand, moist	0-0.5	Yes	SC	65	0
As above, layer broken gravel or concrete to gray silty clay	0.5-2.5	No	SC/CL	65	0
Gray silty clay, medium soft, highly plastic, moist.	4-5	No	CH	50	0
Gray silty clay, medium soft, highly plastic, moist. Bottom 2" is gray sandy silt	5-6	Yes	CH	50	0
Gray silty clay, soft, highly plastic, wet, some interbeds of clayey silt,	8-12	No	CH	85	0
Set PVC screen at 4 to 9 ft bgs (hole collapsed at 9 ft)					

Logged by: Lydia CummingCompletion Date: 4/6/05Notes: Geoprobe 6610 DT, track mounted system with 4ft-samplerTime: 11:00 TO63-R5-SB04-0-0.5/ TO63-R5-SB04-5-6 (soil) TO63-R5-GW01 (water)

Boring Log SheetBoring ID R5-SB02Date 4/6/05Location BallfieldsBoring Diameter 2.5 inTotal Depth 8 ftCasing Outer Diameter -- inSand Pack --Casing Inner Diameter -- inSand Pack Depth from -- to -- ftCasing Material --Grout Material Type I-II CementScreen Type --Grout Depth from 0 to 8 ftScreen Slot --Surface Completion --Screen Length -- ftDrilling Method DIRECT PUSHScreen Depth from -- to -- ftDriller PRECISION**Lithologic Description**

Depth

Sample

USCS

Rec.

PID

Brown clayey sand, little fine gravel, moist

0-0.5

Yes

SC

85

0

As above to gray silty clay, stiff, moderately plastic, moist

0.5-3

No

CL

85

0

Gray silty clay, stiff, moderately plastic, moist

3-4

Yes

CL

85

0

Gray silty clay, more silty than above, wet

4-6

No

CL

50

0

Logged by: Lydia CummingCompletion Date: 4/6/05Notes: Geoprobe 6610 DT, track mounted system with 4ft-samplerTime: 11:15 TO63-R5-SB02-0-0.5/ TO63-R5-SB02

Boring Log SheetBoring ID R5-SB03Date 4/6/05Location BallfieldsBoring Diameter 2.5 inTotal Depth 4 ftCasing Outer Diameter -- inSand Pack --Casing Inner Diameter -- inSand Pack Depth from -- to -- ftCasing Material --Grout Material Type I-II CementScreen Type --Grout Depth from 0 to 4 ftScreen Slot --Surface Completion --Screen Length -- ftDrilling Method DIRECT PUSHScreen Depth from -- to -- ftDriller PRECISION**Lithologic Description**

Brown clayey sand, little fine gravel

Depth

0-0.5

Sample

Yes

USCS

SC

Rec.

75

PID

0

Brown clayey sand, little fine-coarse gravel, semiconsolidated sand

0.5-
2.75

No

SC

75

0

Gray silty clay, medium soft, moist

2.75-3

No

CL

75

0

Logged by: Lydia CummingCompletion Date: 4/6/05Notes: Geoprobe 6610 DT, track mounted system with 4ft-samplerTime: TO63-R5-SB03-0-0.5

Boring Log SheetBoring ID R5-SB01Date 4/6/05Location Ballfields

Boring Diameter	<u>2.5</u> in	Total Depth	<u>4</u> ft
Casing Outer Diameter	<u>--</u> in	Sand Pack	<u>--</u>
Casing Inner Diameter	<u>--</u> in	Sand Pack Depth	from <u>--</u> to <u>--</u> ft
Casing Material	<u>--</u>	Grout Material	<u>Type I-II Cement</u>
Screen Type	<u>--</u>	Grout Depth	from <u>0</u> to <u>4</u> ft
Screen Slot	<u>--</u>	Surface Completion	<u>--</u>
Screen Length	<u>--</u> ft	Drilling Method	<u>DIRECT PUSH</u>
Screen Depth	from <u>--</u> to <u>--</u> ft	Driller	<u>PRECISION</u>

Lithologic Description	Depth	Sample	USCS	Rec.	PID
Brown clayey sand, roots, gravel	0-0.5	Yes	SC	75	0
Brown clayey sand, sandy silt	0.5-2	No	SC	75	0
Dark gray silty clay, stiff, med plastic, moist	2-3	No	CL	75	0

Logged by: Lydia CummingCompletion Date: 4/6/05Notes: Geoprobe 6610 DT, track mounted system with 4ft-sampler
TO63-R5-SB01-0-0.5

Boring Log SheetBoring ID R2-SB03Date 4/6/05Location Ballfields

Boring Diameter	<u>2.5</u> in	Total Depth	<u>4</u> ft
Casing Outer Diameter	<u>--</u> in	Sand Pack	<u>--</u>
Casing Inner Diameter	<u>--</u> in	Sand Pack Depth	from <u>--</u> to <u>--</u> ft
Casing Material	<u>--</u>	Grout Material	<u>Type I-II Cement</u>
Screen Type	<u>--</u>	Grout Depth	from <u>0</u> to <u>4</u> ft
Screen Slot	<u>--</u>	Surface Completion	<u>--</u>
Screen Length	<u>--</u> ft	Drilling Method	<u>DIRECT PUSH</u>
Screen Depth	from <u>--</u> to <u>--</u> ft	Driller	<u>PRECISION</u>

Lithologic Description	Depth	Sample	USCS	Rec.	PID
Brown-gray mottled silty clay, highly plastic, moist	0-0.5	Yes	CH	50	0
As above	0.5-2	No	CH	50	0
Had to bail water out of hole before coring. Area is covered with mud leftover from city.					

Logged by: Lydia CummingCompletion Date: 4/6/05Notes: Geoprobe 6610 DT, track mounted system with 4ft-samplerTime: 13:25 TO63-R2-SB03-0-0.5

Boring Log SheetBoring ID R2-SB02Date 4/6/05Location Ballfields

Boring Diameter	<u>2.5</u> in	Total Depth	<u>4</u> ft
Casing Outer Diameter	<u>--</u> in	Sand Pack	<u>--</u>
Casing Inner Diameter	<u>--</u> in	Sand Pack Depth	from <u>--</u> to <u>--</u> ft
Casing Material	<u>--</u>	Grout Material	<u>Type I-II Cement</u>
Screen Type	<u>--</u>	Grout Depth	from <u>0</u> to <u>4</u> ft
Screen Slot	<u>--</u>	Surface Completion	<u>--</u>
Screen Length	<u>--</u> ft	Drilling Method	<u>DIRECT PUSH</u>
Screen Depth	from <u>--</u> to <u>--</u> ft	Driller	<u>PRECISION</u>

Lithologic Description	Depth	Sample	USCS	Rec.	PID
Leftover dirt pile	1.5	No	--	50	0
Dark gray silty clay, roots	0-0.5	Yes	CL	50	0
This location off concrete, bored to 11.5 ft bgs to set PVC in borehole to collect water sample					

Logged by: Lydia CummingCompletion Date: 4/6/05Notes: Geoprobe 6610 DT, track mounted system with 4ft-samplerTime: 13:45 TO63-R2-SB02-0-0.5 (soil) TO63-R2-GW01 (water)

Boring Log SheetBoring ID R2-SB04Date 4/6/05Location Ballfields

Boring Diameter	<u>2.5</u> in	Total Depth	<u>12</u> ft
Casing Outer Diameter	<u>--</u> in	Sand Pack	<u>--</u>
Casing Inner Diameter	<u>--</u> in	Sand Pack Depth	from <u>--</u> to <u>--</u> ft
Casing Material	<u>--</u>	Grout Material	<u>Type I-II Cement</u>
Screen Type	<u>--</u>	Grout Depth	from <u>0</u> to <u>12</u> ft
Screen Slot	<u>--</u>	Surface Completion	<u>--</u>
Screen Length	<u>--</u> ft	Drilling Method	<u>DIRECT PUSH</u>
Screen Depth	from <u>--</u> to <u>--</u> ft	Driller	<u>PRECISION</u>

Lithologic Description	Depth	Sample	USCS	Rec.	PID
Brown sandy/clayey silt, mottled, very moist	0-0.5	Yes	ML	85	0
Dark brown-gray silty clay, med soft-stiff, moist	0.5-3	No	CL	85	0
Gray silty clay, soft, highly plastic, very moist	3-4	Yes	CH	85	0
Gray silty clay, soft, highly plastic, wet	4-8	No	CH	100	0
As above, more silty	8-10	No	CH	100	0
As above, lighter gray	10-11	No	CH	100	0
Light gray, brown mottled clayey silt, hard	11-12	No	ML	100	0
Bail out hole (dig hole to 1.5 until hit concrete surface, cored concrete) set PVC casing, but water from pile is falling into open borehole. Decide to try another location (R2-SB02) for water sample.					

Logged by: Lydia CummingCompletion Date: 4/6/05Notes: Geoprobe 6610 DT, track mounted system with 4ft-sampler
TO63-R2-SB04-0-0.5/ TO63-R2-SB04-3-4

Boring Log SheetBoring ID R2-SB01Date 4/6/05Location Ballfields

Boring Diameter	<u>2.5</u> in	Total Depth	<u>8</u> ft
Casing Outer Diameter	<u>--</u> in	Sand Pack	<u>--</u>
Casing Inner Diameter	<u>--</u> in	Sand Pack Depth	from <u>--</u> to <u>--</u> ft
Casing Material	<u>--</u>	Grout Material	<u>Type I-II Cement</u>
Screen Type	<u>--</u>	Grout Depth	from <u>0</u> to <u>8</u> ft
Screen Slot	<u>--</u>	Surface Completion	<u>--</u>
Screen Length	<u>--</u> ft	Drilling Method	<u>DIRECT PUSH</u>
Screen Depth	from <u>--</u> to <u>--</u> ft	Driller	<u>PRECISION</u>

Lithologic Description	Depth	Sample	USCS	Rec.	PID
Brown clayey sand, very moist	0-0.5	Yes	SC	50	0
Gray silty clay, soft, highly plastic, moist	0.5-4	Yes (1-2)	CH	50	0
As above, wet	4-7	No	CH	85	0
Gray clayey silt, med soft – stiff, moist	7-8	No	ML	85	0

Logged by: Lydia CummingCompletion Date: 4/6/05Notes: Geoprobe 6610 DT, track mounted system with 4ft-samplerTime: 14:15 TO63-R2-SB01-0-0.5/TO63-R2-SB01-1-2. Duplicate collected

Boring Log SheetBoring ID R1-SB04Date 4/6/05Location BallfieldsBoring Diameter 2.5 inTotal Depth 12 ftCasing Outer Diameter -- inSand Pack --Casing Inner Diameter -- inSand Pack Depth from -- to -- ftCasing Material --Grout Material Type I-II CementScreen Type --Grout Depth from 0 to 12 ftScreen Slot --Surface Completion --Screen Length -- ftDrilling Method DIRECT PUSHScreen Depth from -- to -- ftDriller PRECISION**Lithologic Description**

Depth

Sample

USCS

Rec.

PID

Brown clayey sand, with white gravel (broken up concrete)

0-0.5

Yes

SC

50

0

As above

0.5-2

No

SC

50

0

Brown clayey sand, moist, to brown gray silty clay

2-4

No

CL

50

0

Brown-gray silty clay, med soft, med plastic, moist

4-6

Yes
(4-5)

CL

50

0

As above, layers of more clayey silt, wet (at top)

8-10

No

CL/
ML

100

0

Brown-gray silty clay, soft, highly plastic.

Layer of peat at 11 ft

Dark gray silty clay, trace shell fragments, bottom 1 ft

10-12

No

CH

100

0

Measured water in borehole- 6 ft bgs

Logged by: Lydia CummingCompletion Date: 4/6/05Notes: Geoprobe 6610 DT, track mounted system with 4ft-samplerTO63-R1-SB04-0-0.5/TO63-R1-SB04-4-5

Boring Log SheetBoring ID R1-SB03Date 4/6/05Location BallfieldsBoring Diameter 2.5 inTotal Depth 8 ftCasing Outer Diameter -- inSand Pack --Casing Inner Diameter -- inSand Pack Depth from -- to -- ftCasing Material --Grout Material Type I-II CementScreen Type --Grout Depth from 0 to 8 ftScreen Slot --Surface Completion --Screen Length -- ftDrilling Method DIRECT PUSHScreen Depth from -- to -- ftDriller PRECISION**Lithologic Description**

Depth

Sample

USCS

Rec.

PID

Brown-gray clayey sand, roots

0-0.5

Yes

SC

50

0

As above to gray silty clay, stiff, moist

0.5-1

No

SC/
CL

50

0

As above

1-4

No

CL

50

0

As above

4-5

Yes

CL

100

0

As above

5-8

No

CL

100

0

Estimate water table about 6 ft bgs

Logged by: Lydia CummingCompletion Date: 4/6/05Notes: Geoprobe 6610 DT, track mounted system with 4ft-samplerTO63-R1-SB03-0-0.5/TO63-R1-SB03-4-5

Boring Log SheetBoring ID R1-SB02Date 4/6/05Location Ballfields

Boring Diameter	<u>2.5</u> in	Total Depth	<u>4</u> ft
Casing Outer Diameter	<u>--</u> in	Sand Pack	<u>--</u>
Casing Inner Diameter	<u>--</u> in	Sand Pack Depth	from <u>--</u> to <u>--</u> ft
Casing Material	<u>--</u>	Grout Material	<u>Type I-II Cement</u>
Screen Type	<u>--</u>	Grout Depth	from <u>0</u> to <u>4</u> ft
Screen Slot	<u>--</u>	Surface Completion	<u>--</u>
Screen Length	<u>--</u> ft	Drilling Method	<u>DIRECT PUSH</u>
Screen Depth	from <u>--</u> to <u>--</u> ft	Driller	<u>PRECISION</u>

Lithologic Description

Brown clayey sand, roots, gravel

0-0.5

Yes

SC

50

0

Brown clayey sand, hard

0.5-2

No

SC

50

0

Logged by: Lydia CummingCompletion Date: 4/6/05Notes: Geoprobe 6610 DT, track mounted system with 4ft-samplerTime: 8:40 TO63-R1-SB02-0-0.5

Boring Log SheetBoring ID R1-SB01Date 4/6/05Location BallfieldsBoring Diameter 2.5 inTotal Depth 2 ftCasing Outer Diameter -- inSand Pack --Casing Inner Diameter -- inSand Pack Depth from -- to -- ftCasing Material --Grout Material Type I-II CementScreen Type --Grout Depth from 0 to 2 ftScreen Slot --Surface Completion --Screen Length -- ftDrilling Method DIRECT PUSHScreen Depth from -- to -- ftDriller PRECISION**Lithologic Description**

Depth

Sample

USCS

Rec.

PID

Brown clayey sand with gravel (broken concrete?)

0-0.5

Yes

SC

50

0

Brown clayey sand to gray silty clay, stiff

0.5-2

No

SC/
CL

50

0

Logged by: Lydia CummingCompletion Date: 4/6/05Notes: Geoprobe 6610 DT, track mounted system with 4ft-samplerTO63-R1-SB01-0-0.5/ TO63-R1-SB01-0-0.5-DUP (duplicate)